

## Lui Lam's Scientific Papers

Names of undergraduates are bolded; those of graduate students are in bold and underlined

**L.** Lam = Lui Lam = Lin Lei

- 1968** 1. D. McMillan, P. Bhargava, **L. Lam** and E.W. Vogt: Can. J. Phys. **46**, 1141 (1968).  
   - A Calculation of the Production of Pions by 450 MeV Protons on Nuclei.
- 1970** 2. **L. Lam**: Can. J. Phys. **48**, 1935 (1970).  
   - New Exact Solutions of Dirac Equation.
3. **L. Lam**: Phys. Lett. **31A**, 406 (1970).  
   - Dirac Electron in Parallel Electric and Magnetic Fields.
4. **L. Lam**: Ann. Fisica **66**, 275 (1970).  
   - Escape of Electromagnetic Waves from Magnetic Neutron Star.
- 1971 5. **L. Lam**: J. Math. Phys. **12**, 299 (1971).  
   - Motion in Electric and Magnetic Fields. I. Klein-Gordon Particles.
- 1972 6. P. Eisenberger, **L. Lam**, P.M. Platzman and P. Schmidt: Phys. Rev. B **6**, 3671 (1972).  
   - X-ray Compton Profiles of Li and Na: Theory and Experiments.
- 1973 7. **K.C. Pandey** and **L. Lam**: Phys. Lett. **43A**, 319 (1973).  
   - Core-orthogonalization Effect and the Compton Profile of Sodium Metal.
8. L. Lam: Phys. Lett. **45A**, 409 (1973).  
   - Surfaces de Fermi, Profil Compton et Effets a N-corps.
- 1974 9. L. Lam and **H. Ho**: Lett. Nuovo Cimento **11**, 159 (1974).  
   - Scattering Form Factors of Atoms, Molecules and Solids.
10. **L. Lam** and P.M. Platzman: Phys. Rev. B **9**, 5122 (1974).  
   - Momentum Density and Compton Profile of the Inhomogeneous Interacting Electronic System. I. Formalism.
11. **L. Lam** and P.M. Platzman: Phys. Rev. B **9**, 5128 (1974).  
   - Momentum Density and Compton Profile of the Inhomogeneous Interacting Electronic System. II. Application to Atoms.
- 1976 12. A. Bunde and L. Lam: Phys. Lett. **58A**, 234 (1976).  
   - On the Transition Temperature of Ferroelectric and the Blume-Hubbard Scheme.
- 1977 13. A. Bunde and L. Lam: Solid State Commun. **21**, 71 (1977).  
   - Rigorous Bounds in Structural Phase Transitions.
14. L. Lam and A. Bunde: J. Phys. C **10**, 693 (1977).  
   - Temperature Dependence of the Transverse Spin in the Transverse Ising Model.
15. A. Bunde and L. Lam: Z. Physik B **28**, 225 (1977).  
   - Anharmonic Phonons and Structural Phase Transitions.

16. L. Lam: Z. Physik B **27**, 101 (1977).  
   - Dissipation Function and Conservation Laws of Molecular Liquids and Solids.
17. L. Lam: Z. Physik B **27**, 273 (1977).  
   - Reciprocal Relations of Transport Coefficients in Simple Materials.
18. L. Lam: Z. Physik B **27**, 349 (1977).  
   - Constraints, Dissipation Functions and Cholesteric Liquid Crystal.
- 1978 19. L. Lam and A. Bunde: in *Lattice Dynamics*, ed. M. Balkanski (Flammarion, Paris, 1978), p. 521.  
   - Microscopic Theory of Superionic Conductors.
20. A. Bunde and L. Lam: Annals of Israel Physical Soc. **2**, 573 (1978).  
   - Statistical Mechanics of Superionic Conductors.
21. L. Lam and A. Bunde: Z. Physik B **30**, 65 (1978).  
   - Phase Transitions and Dynamics of Superionic Conductors.
22. L. Lam and M. Lax: Phys. Fluids **21**, 9 (1978).  
   - Irreversible Thermodynamics of Thermoviscous Solids with Microstructures.
23. B.Y. Tong and L. Lam: Phys. Rev. A **18**, 552 (1978).  
   - Compton Profiles of Ne, Ar and Kr.
24. Lin Lei: Kexue Tongbao **23**, 715 (1978).  
   - Microscopic Theory of First Order Phase Transitions in Liquid Crystals.
- 1979 25. Lin Lei and Cai Jundao: Scientia Sinica (Forgn. Lang. Ed.) **22**, 1258 (1979).  
   - Nematic Liquid Crystals and Landau's Theory of Phase Transitions.
26. Lin Lei: Phys. Rev. Lett. **43**, 1604 (1979).  
   - Nematic-Isotropic Transitions in Liquid Crystals.
- 1980 27. **Liu Jiagang** and Lin Lei: Kexue Tongbao (Forgn. Lang. Ed.) **25**, 17 (1980).  
   - Nonlinear Liquid Crystals.
28. Lin Lei: in *Liquid Crystals*, ed. S. Chandrasekhar (Heyden, London, 1980), p. 355.  
   - Critical Properties of Nematic-Isotropic Transitions in Liquid Crystals.
29. Lin Lei: Wuli **9**, 8 (1980).  
   - A Simple Derivation of Free Energy in Liquid Crystals.
30. Lin Lei: Wuli **9**, 135 (1980).  
   - Superionic Conductors.
31. Lin Lei: Kexue Tongbao (Forgn. Lang. Ed.) **25**, 798 (1980).  
   - Nontricritical Behavior of Nematic-Isotropic Transition in Liquid Crystals.
32. Lin Lei: Baise Zhishi (Beijing) **6**, 60 (1980).  
   - Liquid Crystals.

33. Lin Lei and **Liu Jiagang**: Nature J. (Shanghai) **3**, 478 (1980).  
   - On the Critical Exponents of Liquid Crystals.
34. Zhang Zhaoqing, Feng Kean and Lin Lei: Acta Physica Sinica **29**, 807 (1980)  
   [Chinese Phys. **1**, 110 (1980)].  
   - Generalized Suzuki Formula and Its Application in Liquid Crystals.
35. Lin Lei and **Wang Xinyi**: Acta Physica Sinica **29**, 1427 (1980) [Chinese Phys. **2**, 77 (1982)].  
   - Landau-de Gennes Model of First Order Phase Transitions: Gaussian Approximation.
- 1981   36. Lin Lei and **Wang Xinyi**: in *Recent Developments in Condensed Matter Physics*, Vol. 4, eds. J.T. Devreese, L.F. Lemmens, V.E. Van Doren and J. Van Royen (Plenum, New York, 1981), p. 125.  
   - Landau-de Gennes Model of First Order Transitions.
37. Shen Juelian, Lin Lei, Yu Lu and Chia-Wei Woo: Mol. Cryst. Liq. Cryst. **70**, 301 (1981).  
   - Molecular Theory of Liquid Crystals Including Anisotropic Repulsion.
38. Lin Lei: in *Science Yearbook 1981* (Shanghai Science and Technology Press, Shanghai, 1981), p. I.21.  
   - Liquid Crystal Research in China.
- 1982   39. Lin Lei: Nature J. (Shanghai) **5**, 74 (1982).  
   - Light Scattering in Homologous Series of Liquid Crystals.
40. **Shu Changqing**, Lin Lei and Wang Liangyu: Commun. Theor. Phys. (Beijing) **1**, 107 (1982).  
   - I-N-A Phase Diagrams of Liquid Crystals.
41. Lin Lei: Wuli **11**, 171 (1982).  
   - Liquid Crystals Phases and "Dimensionality" of Molecules.
42. Lin Lei: Wuli **11**, 220 (1982).  
   - Specific Heats Above and Below the Clearing Point of Nematic Liquid Crystals.
43. Lin Lei: J. Phys. (Paris) **43**, 251 (1982).  
   - Effective Exponents of Nematic Liquid Crystals.
44. Lin Lei and Huang Yun: Phys. Lett. **89A**, 287 (1982).  
   - Pretransitional Effects of Mixtures of Nematic Liquid Crystals.
45. Lin Lei and **Liu Jiagang**: Kexue Tongbao **27**, 784 (1982)  
   [Kexue Tongbao (Forgn. Lang. Ed.) **28**, 896 (1983)].  
   - Pressure Effects of Nematic Liquid Crystals.
46. **Shu Changqing** and Lin Lei: Acta Physica Sinica **31**, 915 (1982).  
   - Molecular Theory of Liquid Crystals.
47. **Liu Jiagang** and Lin Lei: Wuli **11**, 346 (1982).  
   - Order Parameter and Correlation Function of Classical Systems and Ising Model.
48. Lin Lei, **Shu Changqing**, Shen Juelian, P.M. Lam and Huang Yun:

- Phys. Rev. Lett. **49**, 1335 (1982); **52**, 2190 (E) (1984).  
 - Soliton Propagation in Liquid Crystals.
49. Lin Lei and **Liu Jiagang**: Mol. Cryst. Liq. Cryst. **89**, 259 (1982).  
 - Pressure Effects of Nematic Liquid Crystals. I.
50. **Liu Jiagang** and Lin Lei: Mol. Cryst. Liq. Cryst. **89**, 275 (1982).  
 - Pressure Effects of Nematic Liquid Crystals. II.
51. Lin Lei: Commun. Theor. Phys. (Beijing) **1**, 691 (1982).  
 - Flexoelectric Constants of Liquid Crystals.
52. Lin Lei: in *Recent Developments in Statistical Mechanics and Condensed Matter Theory* (Huazhong Inst. Tech. Press, Wuhan, 1982).  
 - Solitons in Condensed Matter.
- 1983 53. Xie Yuzhang, **Ouyang Zhongcan** and Lin Lei: Mol. Cryst. Liq. Cryst. **101**, 19 (1983).  
 - Electric Field Effects on the Elastic Constants of Nematics. I.
54. Lin Lei: Mol. Cryst. Liq. Cryst. **91**, 77 (1983).  
 - Liquid Crystal Research in China: 1970-1982.
55. Xie Yuzhang and Lin Lei: Mol. Cryst. Liq. Cryst. **91**, 93 (1983)  
 - Brief Report on the 1981 Chinese Liquid Crystal Conference.
56. Lin Lei: Phil. Trans. R. Soc. Lond. **A309**, 69 (1983).  
 - Discussions on the Physics, Chemistry and Applications of Thermotropic Liquid Crystals.
57. **Wang Xinyi** and Lin Lei: Acta Physica Sinica **32**, 1565 (1983) [Chin. Phys. **4**, 786 (1984)].  
 - Electrohydrodynamic Instabilities of Nematic Liquid Crystals: Effect of an Inclined Electric Field.
- 1984 58. Lin Lei: in *Liquid Crystals*, eds. Tan Manqi et al. (Popular Science Press, Beijing, 1984).  
 - Progress in Liquid Crystal Physics.
59. Lin Lei and **Shu Changqing**: Acta Phys. Sinica **33**, 165 (1984). [Chin. Phys. **4**, 598 (1984)].  
 - Soliton Propagation in Shearing Liquid Crystals.
60. L. Lam, A. Bunde and A.K. Theophilou: J. Phys. A **17**, 3107 (1984).  
 - Inequalities for Liquids in a Periodic Potential.
61. **Shu Changqing** and Lin Lei: Mol. Cryst. Liq. Cryst. **112**, 213 (1984).  
 - Theory of Homologous Liquid Crystals. I: Phase Diagrams and the Even-Odd Effect.
62. **Shu Changqing** and Lin Lei: Mol. Cryst. Liq. Cryst. **112**, 233 (1984).  
 - Theory of Homologous Liquid Crystals. II. Orientation Correlation Functions.
- 1985 63. **Shu Changqing**, **Xu Gang** and Lin Lei: Acta Physica Sinica **34**, 88 (1985).  
 - Temporal and Spatial Distribution of Director Angles in Soliton Experiments of Liquid Crystals.
64. **He Gang**, **Shu Changqing** and Lin Lei: Mol. Cryst. Liq. Cryst. **124**, 53 (1985).  
 - Molecular Orientations and Optical Patterns of Rotating Nematics.

65. L. Lin, C.Q. Shu and G. Xu: Phys. Lett. **109A**, 277 (1985).  
     - Comment on "On Solitary Waves in Liquid Crystals".
66. Xu Gang, Shu Changqing and Lin Lei: J. Math. Phys. **26**, 1566 (1985).  
     - Multiple Scales Analysis of a Nonlinear Ordinary Differential Equation.
67. Lin Lei, Shu Changqing and Xu Gang: J. Stat. Phys. **39**, 633 (1985); **43**, 391 (E) (1986).  
     - Generation and Detection of Propagating Solitons in Shearing Liquid Crystals.
68. Shu Changqing and Lin Lei: Mol. Cryst. Liq. Cryst. **131**, 47 (1985).  
     - Solitons Generated by Pressure Gradients in Nematic Liquid Crystals.
- 1986 69. Liang Zhong-Cheng, Shao Ren-Fan, Shu Chang-Qing, Wang Liang-Yu and Lin Lei: Mol. Cryst. Liq. Cryst. Lett. **3**, 113 (1986).  
     - Variation of Velocities and Widths of Two-Dimensional Solitons with Pressure Gradients in Nematic Disc Cells.
70. R. Ribotta, A. Joets and Lin Lei: Phys. Rev. Lett. **56**, 1595 (1986); **56**, 2335 (E) (1986).  
     - Oblique Roll Instability in an Electroconvective Anisotropic Fluid.
71. L. Lam : Physics Today, June 1986, p.122.  
     - The Balancing Act.
72. L. Lam and Shu Changqing: in *Proceedings of the International Conference on Nonlinear Mechanics*, Shanghai, October 28-31, 1985, edited by Chien Wei-Zang (World Scientific, Singapore, 1986), p.735.  
     - Nonlinear Waves in Liquid Crystals.
73. Lin Lei and Shu Changqing: Phys. Lett. A. **119**, 178 (1986).  
     - Comment on "Nerve Propagation and Wall in Liquid Crystals".
- 1987 74. Shao Renfan, Zheng Shu, Liang Zhongcheng, Shu Changqing and Lin Lei: Mol. Cryst. Liq. Cryst. **144**, 345 (1987).  
     - Experiments on Ring-Shaped Solitons in Nematic Liquid Crystals.
75. Shu Changqing and Lin Lei: Mol. Cryst. Liq. Cryst. **146**, 97 (1987).  
     - Pattern Formation in Thermal Convective Nematic Liquid Crystals.
76. K.M. Leung and Lin Lei: Mol. Cryst. Liq. Cryst. **146**, 71 (1987).  
     - Phase Transition in Bowlic Liquid Crystals.
77. Lin Lei: Mol. Cryst. Liq. Cryst. **146**, 41 (1987) [Wuli **16**, 195 (1987)].  
     - Bowlic Liquid Crystals.
78. R.F. Shao, S.L. Yang and L. Lam: J. Nanjing Normal Univ. (Natural Sci.) **2**, 42 (1987).  
     - Flexoelectric Effect of Solitons in Nematic Liquid Crystals under Uniform Shear.
79. Z.C. Liang, R.F. Shao, S.L. Yang and L. Lam: J. Nanjing Normal University (Natural Sci.) **2**, 58 (1987).  
     - Experiments on Time Dependence of Light Intensities of Two-Dimensional Solitons in Nematic Disc Cells.

80. **Xu Gang**, Shu Changqing and Lin Lei: Phys. Rev. A **36**, 277 (1987).  
 - Perturbed Solitons in Nematic Liquid Crystals Under Time-Dependent Shear.
81. L. Lam and E. Lowy: The Physics Teacher **25**, 504 (1987).  
 - On the Static Friction of a Rolling Wheel.
82. C.Q. Shu, R.F. Shao, **S. Zheng**, **Z.C. Liang**, **G. He**, **G. Xu** and L. Lam: Liq. Cryst. **2**, 717 (1987).  
 - Two-Dimensional Axisymmetric Solitons in Nematic Liquid Crystals.
83. L. Lam and J.A. Zhao: in *Chinese Encyclopedia-Physics Section* (Chinese Encyclopedia Press, Beijing, 1987).  
 - Liquid Crystals.
84. J.A. Zhao and L. Lam: in *Chinese Encyclopedia-Physics Section* (Chinese Encyclopedia Press, Beijing, 1987).  
 - Theory of Liquid Crystals.
- 1988 85. L. Lam: Mol. Cryst. Liq. Cryst. **155**, 531 (1988).  
 - Bowlic and Polar Liquid Crystal Polymers.
86. L. Lam, Z.C. Ou-Yang and M. Lax: Phys. Rev. A **37**, 3469 (1988).  
Ab Initio Theory of Linear and Nonlinear Optics of Liquid Crystals.
87. R.F. Shao, **H. Liu** and L. Lam: J. Nanjing Normal Univ. (Natural Sci.) **2**, 59 (1988).  
 - Moving Nematic-Air Interfacial Patterns in Hele-Shaw Cells.
88. **S. Zheng**, **Z.C. Liang**, R.F. Shao, L. Lam, C.W. Cheng and P.C.W. Fung: Phys. Rev. A **38**, 5941 (1988).  
 - Propagation of White Ring-Shaped Solitons in Nematic Liquid Crystals.
89. L. Lam: in *3rd Asia Pacific Physics Conference*, edited by Y.W. Chan, A.F. Leung, C.N. Yang and K. Young (World Sci., Singapore, 1988).  
 - Possible Liquid Crystalline High T<sub>c</sub> Superconductors.
90. **Z.C. Liang**, R.F. Shao, S.L. Yang and L. Lam: in *3rd Asia Pacific Physics Conference*, edited by Y.W. Chan, A.F. Leung, C.N. Yang and K. Young (World Sci., Singapore, 1988).  
 - Time Dependence of Optical Intensities in Two-Dimensional Soliton Experiments with Circular Nematic Liquid Crystal Cells.
- 1989 91. L. Lam: in *Wave Phenomena*, edited by L. Lam and H.C. Morris (Springer, New York, 1989).  
 - Waves in Anisotropic Media
92. S.L. Yang, Z.C. Liang, R.F. Shao and L. Lam: in *Wave Phenomena*, edited by L. Lam and H.C. Morris (Springer, New York, 1989).  
 - Interfacial Waves in Hele-Shaw Cells of Liquid Crystal-Air Systems.
93. L. Lam, H.C. Morris, R.F. Shao, S.L. Yang, **Z.C. Liang**, **S. Zheng** and **H. Liu**: Liq. Cryst. **5**, 1813 (1989).  
 - Dynamics of Viscous Fingers in Hele-Shaw Cells of Liquid Crystals: Theory and Experiment

94. L. Lam, in *Liquid Crystals - West '89*, edited by L. Lam (Society of Archimedes, San Jose, 1989).  
 - Response of Bowlic Liquid Crystals in External Fields.
- 1990** 95. **V.M. Castillo, R.D. Pochy** and L. Lam: in *Applications of Statistical and Field Theory Methods to Condensed Matter*, edited by D. Baeriswyl, A.R. Bishop and J. Camelo (Plenum, New York, 1990).  
 - Pattern Changes in Electrodeposit of CuSO<sub>4</sub>
96. L. Lam, **R.D. Pochy** and **V.M. Castillo**: in *Nonlinear Structures in Physical Systems*, edited by L. Lam and H.C. Morris (Springer, New York, 1990).  
 - Pattern Formation in Electrodeposits.
97. **M.A. Guzman, R.D. Freimuth, P.U. Pendse, M.C. Veinott** and L. Lam: in *Nonlinear Structures in Physical Systems*, edited by L. Lam and H.C. Morris (Springer, New York, 1990).  
 - Experiments on Electrodeposit Patterns.
- 1991 98. L. Lam: in *Nonlinear and Chaotic Phenomena*, edited by W. Rozmus and J.A. Tuszynski (World Scientific, Teaneck, 1991).  
 - Unsolved Nonlinear Problems in Liquid Crystals.
99. **M.K. Pon** and L. Lam: in *Nonlinear and Chaotic Phenomena*, edited by W. Rozmus and J.A. Tuszynski (World Scientific, Teaneck, 1991).  
 - Stability of Dense Morphologies in Electrodeposit Pattern Formation.
100. L. Lam, **R.D. Freimuth** and H.S. Lakkaraju: Mol. Cryst. Liq. Cryst. **199**, 249 (1991).  
 - Fractal Patterns in Burned Hele-Shaw Cells of Liquid Crystals and Oils.
101. **R.D. Pochy**, A. Garcia, **R.D. Freimuth**, **V.M. Castillo** and L. Lam: Physica D **51**, 539 (1991).  
 - Electrodeposit Tree Patterns in Linear Cells: Experiment and Computer Models.
102. L. Lam, F. Dowell, H. Brand and G. Ahlers, J. Stat. Phys. **64**, 899 (1991).  
 - Foreword (Proceedings of NATO Advanced Research Workshop on Nonlinear Dynamical Structures in Simple and Complex Liquids, Los Alamos, New Mexico, June 26-29, 1990).
- 1992 103. L. Lam and J. Prost: in *Solitons in Liquid Crystals*, edited by L. Lam and J. Prost (Springer, New York, 1992).  
 - Chapter 1. Introduction.
104. L. Lam: in *Solitons in Liquid Crystals*, edited by L. Lam and J. Prost (Springer, New York, 1992).  
 - Chapter 2. Solitons and Field Induced Solitons in Liquid Crystals.
105. L. Lam and C.Q. Shu: in *Solitons in Liquid Crystals*, edited by L. Lam and J. Prost (Springer, New York, 1992).  
 - Chapter 3. Solitons in Shearing Liquid Crystals.
106. X.J. Wang and L. Lam, Liq. Cryst. **11**, 411 (1992).  
 - Statistical Model of Polar Nematic Polymers.
107. **C. Larsen** and L. Lam, in *Modeling Complex Phenomena*, edited by L. Lam and V. Naroditsky (Springer, New York, 1992).  
 - Chaos and the Foreign Exchange Market.

108. **R.D. Freimuth** and L. Lam, in *Modeling Complex Phenomena*, edited by L. Lam and V. Naroditsky (Springer, New York, 1992).  
 - Active Walker Models for Filamentary Growth Patterns.
109. L. Lam, **R.D. Freimuth**, **M.K. Pon**, **D.R. Kayser**, **J.T. Fredrick** and **R.D. Pochy**, in *Pattern Formation in Complex Dissipative Systems*, edited by S. Kai (World Scientific, River Edge, 1992).  
 - Filamentary Patterns and Rough Surfaces.
110. P.T. Leung, **N. Do**, L. Klees, W.P. Leung, F. Tong, L. Lam, W. Zapka and A.C. Tam, *J. Appl. Phys.* **51**, 2256 (1992).  
 - Transmission Studies of Explosive Vaporization of a Transparent Liquid Film on an Opaque Solid Surface Induced by Excimer-Laser-Induced Irradiation.
111. **D.R. Kayser**, **L. Aberle**, **R.D. Pochy** and L. Lam, *Physica A* **191**, 17 (1992).  
 - Active Walker Models for Filamentary Patterns and Rough Surfaces.
- 1993 112. **R.D. Pochy**, **D.R. Kayser**, **L. Aberle** and L. Lam, *Physica D* **66**, 166 (1993).  
 "Boltzmann Active Walker and Rough Surfaces".
- 1993 113. L. Lam and **R.D. Pochy**, *Comput. Phys.* **7**, 534 (1993).  
 "Active Walker Models: Growth and Form in Nonequilibrium Systems".
114. L. Lam and **Y.S. Yung**, in *Modern Topics in Liquid Crystals*, edited by A. Buka (World Scientific, River Edge, 1993).  
 "Optical Solitons in Liquid Crystals".
115. L. Lam, *Liq. Cryst.* **14**, 1873-1876 (1993).  
 "Reentrant Solitons".
- 1994 116. L. Lam, in *Liquid Crystalline and Mesomorphic Liquid Crystals*,  
 edited by V.P. Shibaev and L. Lam (Springer, New York, 1994).  
 - Chapter 10. Bowlics.
117. **Y.S. Yung** and L. Lam, in *Novel Laser Sources and Applications*, edited by J.F. Becker, A.C. Tam, J.B. Gruber and L. Lam (SPIE Optical Engineering Press, Bellington, WA, 1994)  
 - Frequency and Temperature Dependence of Refractive Indices of Liquid Crystals.
118. L. Lam, *Overseas Chinese Physics Association Newsletter* **1** (11), 13 (1994).  
 - Intrinsic Abnormal Growth.
119. L. Lam, in *Lecture Notes on Thermodynamics and Statistical Mechanics*, edited by M. Costas, P. Rodriguez and A.L. Benavides (World Scientific, River Edge, 1994).  
 - Active Walks.
- 1995 120. L. Lam, **M.C. Veinott** and **R.D. Pochy**, in *Spatiotemporal Patterns in Nonequilibrium Complex Systems*, edited by P.E. Cladis and P. Palffy-Muhoray (Addison-Wesley, Redwood City, 1995).  
 - Abnormal Spatio-Temporal Growths.
121. L. Lam, *Chaos Solitons Fractals* **6**, 267 (1995).  
 - Active Walkers Models for Complex Systems.

122. R.P. Pan, C.R. Sheu and L. Lam, *Chaos Solitons Fractals* **6**, 495 (1995).  
 - Dielectric Breakdown Patterns in Thin Layers of Oils.
123. V.M. Castillo, M.C. Veinott and L. Lam, *Chaos Solitons and Fractals* **6**, 67 (1995).  
 - Neural Network for Classification of Active Walker Patterns.
124. G. Marshall, S. Tagtachian and L. Lam, *Chaos Solitons Fractals* **6**, 325 (1995).  
 - Growth Pattern Formation in Copper Electrodeposition: Experiments and Computational Modelling.
125. L. Lam, **R.W. Koepeke** and T.Y. Lin, in *Rough Sets and Soft Computing*, ed. T.Y. Lin (Society of Computer Simulation, San Diego, 1995).  
 - Active Walks and Soft Computing
126. L. Lam, *Chaos Solitons Fractals* **5**, 2463 (1995).  
 - Solitons in Liquid Crystals: Recent Developments
127. L. Lam, in *Defect Structures, Morphology and Properties of Deposits*, edited by H.D. Merchant (Minerals, Metals and Materials Society, Warrendale, PA, 1995).  
 - Electrodeposition Pattern Formation: An Overview.
- 1996 128. L. Lam, **M.C. Veinott, D. Ratoff** and **R.D. Pochy**, in *Fluctuations and Order*, edited by M. Millonas (Springer, New York, 1996).  
 - Noise Induced Abnormal Growth.
- 1997 129. L. Lam, in *Introduction to Nonlinear Physics*, edited by L. Lam (Springer, New York, 1997).  
 - Chapter 1. Introduction.
130. L. Lam, in *Introduction to Nonlinear Physics*, edited by L. Lam (Springer, New York, 1997).  
 - Chapter 10. Integrable Systems.
131. L. Lam, in *Introduction to Nonlinear Physics*, edited by L. Lam (Springer, New York, 1997).  
 - Chapter 11. Nonintegrable Systems.
132. L. Lam, in *Introduction to Nonlinear Physics*, edited by L. Lam (Springer, New York, 1997).  
 - Chapter 15. Active Walks: Pattern Formation, Self-Organization, and Complex Systems.
133. Ru-Pin Pan and L. Lam, in *Proceedings of Workshop on Centenary Celebration of Chiao Tung University* (School of Science, National Chiao Tung University, Hsinchu, 1997).  
 - Nonlinear Science: A Quiet Revolution in Natural and Social Sciences.
- 1998 134. L. Lam, in *Nonlinear Physics for beginners*, edited by L. Lam (World Scientific, River Edge, N.J., 1998).  
 - Chapter 1. Introduction
135. L. Lam, in *Nonlinear Physics for beginners*, edited by L. Lam (World Scientific, River Edge, N.J., 1998).  
 - Chapter 2. Fractals.
136. L. Lam, in *Nonlinear Physics for beginners*, edited by L. Lam (World Scientific, River Edge, N.J., 1998).  
 - Chapter 3. Chaos.

137. L. Lam, in *Nonlinear Physics for beginners*, edited by L. Lam (World Scientific, River Edge, N.J., 1998).  
 - Chapter 4. Solitons.
138. L. Lam, in *Nonlinear Physics for beginners*, edited by L. Lam (World Scientific, River Edge, N.J., 1998).  
 - Chapter 5. Pattern Formation.
139. L. Lam, in *Nonlinear Physics for beginners*, edited by L. Lam (World Scientific, River Edge, N.J., 1998).  
 - Chapter 6. Cellular Automata.
140. L. Lam, in *Nonlinear Physics for beginners*, edited by L. Lam (World Scientific, River Edge, N.J., 1998).  
 - Chapter 7. Complex Systems.
141. L. Lam, in *Nonlinear Physics for beginners*, edited by L. Lam (World Scientific, River Edge, N.J., 1998).  
 - Chapter 8. Remarks and Further Reading.
142. L. Lam, **R.D. Freimuth** and **J.L. Drake**, in *Nonlinear Physics for Beginners*, edited by L. Lam (World Scientific, River Edge, N.J., 1998).  
 - Simple Multifractals with Sierpinski Gasket Supports.
143. A. Joets, R. Ribotta and L. Lam, in *Nonlinear Physics for Beginners*, edited by L. Lam (World Scientific, River Edge, N.J., 1998).  
 - Critical Behavior in the Transitions to Convective Flows in Nematic Liquid Crystals.
144. L. Lam, C.-Q. Shu and **S. Bodefeld**, in *Nonlinear Physics for Beginners*, edited by L. Lam (World Scientific, River Edge, N.J., 1998).  
 - Active Walks and Path Dependent Phenomena in Social Systems.
- 2000**
145. L. Lam, *Physics (Beijing)* **29**, 497 (2000).  
 “The Birth of Bowlic Liquid Crystals”.
146. L. Lam, *Physics (Beijing)* **29**, 531-535 (2000).  
 “Active Walks: Pattern Formation, Self-Organization, Complex Systems”.
147. L. Lam, *Skeptic* **8**(3), 71-77 (2000).  
 “How Nature Self-Organizes: Active Walk in Complex Systems”.
- 2001
148. **Wei Chen**, Kunquan Lu, Zehui Jiang, Meying Hou and Lui Lam, in *Powder and Grains 2001*, edited by Y. Kishino (Balkema Publ., Lisse, The Netherlands, 2001).  
 “Electric-Field Induced Retardation of Granular Flows in a Pipe”.
149. **Wei Chen**, Meiying Hou, Kunquan Lu, Zehui Jiang, Chenxi Li, and Lui Lam, *Europhys. Lett.* **56**, 536 (2001).  
 “Intermittent Granular Flow in the Presence of an Electric Field”.
150. **Wei Chen**, Meying Hou, Kunquan Lu, Zehui Jiang, and Lui Lam, *Phys. Rev. E* **64**, 061305 (2001).

- “Granular Flows Through Vertical Pipes Controlled by an Electric Field”.
151. L. Lam, in *Public Understanding of Science*, edited by Editorial Committee (University of Science and Technology of China U. P., Hefei, 2001), pp 330-336.  
“Raising the Scientific Literacy of the Population: A Simple Tactic and a Global Strategy”.
- 2002 152. **Wei Chen**, Meying Hou, Kunquan Lu, Zehui Jiang, and Lui Lam, *Appl. Phys. Lett.* **80**, 2213 (2002).  
“Retardation and Phase Transitions of Dilute and Dense Flows in Vertical Pipes Induced by Electric Fields”.
153. L. Lam, *Mod. Phys. Lett. B* **16**, 1163-1176 (2002). [Also appeared in *Frontiers of Science: In Celebration of the 80th Birthday of C.N. Yang*, edited by H.T. Nieh (World Scientific, Singapore, 2003), pp 456-471.]  
“Histophysics: A New Discipline”.
- 2003 154. L. Lam, in *Advances in Stochastic Structural Dynamics*, edited by W.Q. Zhu, G.Q. Cai, and R.C. Zhang (CRC Press, Boca Raton, FL., 2003), pp. 287-292.  
“Stochastic Active Walks and Positive-Feedback Systems”.
155. L. Lam, in *Humanity 3000, Seminar No. 3 Proceedings* (Foundation For the Future, Bellevue, Washington, 2003), pp. 109-117.  
“Modeling History and Predicting the Future: The Active Walk Approach”.
156. L. Lam, in *On the Frontiers of Science*, Vol. 2, edited by G. K. Liu (Tsinghua University Press and Interpress, Beijing, 2003), pp. 73-83.  
“Histophysics: Merging Humanities with Science”.
- 2004 157. L. Lam, *Leonardo* **37**(1), 37-38 (2004).  
“A Science-and-Art Interstellar Message: The Self-Similar Sierpinski Gasket”.
- 2005 158. L. Lam, *Int. J. Bifurcation and Chaos* **15**, 2317-2348 (2005).  
“Active Walks: The First Twelve Years (Part I)”.
159. L. Lam, *Physics* **34**, 528-533 (2005).  
“The Origin of the International Liquid Crystal Society and Active Walks”.
160. L. Lam, *The Pantaneto Forum*, Issue **18** (2005).  
“Why There are No Professional Popular Science Book Authors in China”.
161. L. Lam, *The Pantaneto Forum*, Issue **19** (2005).  
“Integrating Popular Science Books Into College Science Teaching”.
- 2006 162. L. Lam, *The Pantaneto Forum*, Issue **21** (2006).  
“New Concepts for Science Museums”.
163. L. Lam, *The Pantaneto Forum*, Issue **24** (2006).  
“The Two Cultures and The Real World”.
164. L. Lam, *Int. J. Bifurcation and Chaos* **16**, 239-268 (2006).  
“Active Walks: The First Twelve Years (Part II)”.

165. L. Lam, *Science Popularization* **2**, 36-41 (2006).  
 “Science Communication: What Every Scientist Can Do and a Physicist’s Experience”.
- 2008 166. L. Lam, in *China Interdisciplinary Science*, Vol. 2, edited by Liu Zhonglin (Science Press, Beijing, 2007)  
 “Science Matters: The Newest and Biggest Interdiscipline”, pp. 1-7.
167. L. Lam, in *Science Matters: Humanities as Complex Systems*, edited by M. Burguete and L. Lam (World Scientific, Singapore, 2008), pp. 1-38.  
 “Chapter 1: Science Matters: A Unified Perspective”.
168. L. Lam, in *Science Matters: Humanities as Complex Systems*, edited by M. Burguete and L. Lam (World Scientific, Singapore, 2008), pp. 89-118.  
 “Chapter 5: SciComm, PopSci and The Real World”.
169. L. Lam, in *Science Matters: Humanities as Complex Systems*, edited by M. Burguete and L. Lam (World Scientific, Singapore, 2008), pp. 234-254.  
 “Chapter 13: Human History: A Science Matter”.
- 2010 170. L. Lam, *Science & Cultural Review* (Beijing) Vol. 7, No. 2, pp. 84-94.  
 “The First ‘Non-Government’ Visiting-Scholar Delegation in the United States of America from People’s Republic of China, 1979-1981”.
171. L. Lam, D. C. Bellavia, X.-P. Han, C.-H. A. Liu, C.-Q. Shu, Z. Wei, T. Zhou and J. Zhu, *Europhys. Lett.* **91**, 68004 (2010).  
 “Bilinear Effect in Complex Systems”.
172. L. Lam, in *Science and Arts: Overlapping and Integrating*, Proceedings of International Conference on Science and Arts, Beijing, July 10-11, 2010 (Tsinghua University Press, Beijing).  
 “Arts: A Science Matter”.
173. L. Lam, in *New Perspectives on Modern Science/Technology and Modern Art*, Proceedings of First National Forum on Science, Art and Philosophy, Xichang, August 16-17, 2010 (Sichuan Science and Technology Press, Chongqing).  
 “Origin and Nature of Arts: A SciMat Perspective”.
174. L. Lam, in 《科学的越位》, 江晓原、刘兵 编 (华东师范大学出版社, 上海, 2010) pp. 126—138.  
 “Does God Exist?”
- 2011 175. L. Lam, in *Arts: A Science Matter*, edited by M. Burguete and L. Lam (World Scientific, Singapore, 2011).  
 “Chapter 1: Arts: A Science Matter”.
176. H. Tsui and L. Lam, in *Arts: A Science Matter*, edited by M. Burguete and L. Lam (World Scientific, Singapore, 2011).  
 “Chapter 10: Making Movies and Making Physics”.
177. L. Lam and L.-M. Qiu, in *Arts: A Science Matter*, edited by M. Burguete and L. Lam (World Scientific, Singapore, 2011).  
 “Chapter 17: Su Tungpo’s Bambo and Cezanne’s Apple”.
- 2014 178. L. Lam, in *All About Science: Philosophy, History, Sociology & Communication*, edited by M. Burguete and L. Lam (World Scientific, Singapore, 2013).

- “Chapter 1: About Science 1: Basics—Knowledge, Nature, Science and Scimat”.
179. L. Lam, in *All About Science: Philosophy, History, Sociology & Communication*, edited by M. Burguete and L. Lam (World Scientific, Singapore, 2013).  
“Chapter 2: About Science 2: Philosophy, History, Sociology and Communication”.
180. L. Lam, in *All About Science: Philosophy, History, Sociology & Communication*, edited by M. Burguete and L. Lam (World Scientific, Singapore, 2013).  
“Chapter 9: The Founding of the International Liquid Crystal Society”.
181. L. Lam, in *All About Science: Philosophy, History, Sociology & Communication*, edited by M. Burguete and L. Lam (World Scientific, Singapore, 2013).  
“Chapter 11: Soltions and Revolution in China: 1978-1983”.
- 2016 182. L. Lam, “Philosophy, Science and Scimat,” in *Humanities as Science Matters: History, Philosophy and Arts*, eds. M. Burguete & H. Riesch, (Pantaneto Press, Luton, UK, 2016).
183. M. Burguete and L. Lam, “The Scimat Program,” in *Humanities as Science Matters: History, Philosophy and Arts*, eds. M. Burguete & H. Riesch, (Pantaneto Press, Luton, UK, 2016).
- 2017 184. L. Lam, “Prehistory of International Liquid Crystal Society, 1978-1990: A Personal Account,” *Molecular Crystals and Liquid Crystals* **647**, 351-372 (2017).
185. L. Lam, “Humanities, Science, Scimat: A New General-Education Course,” in *Interdisciplinarity and General Education in the 21<sup>st</sup> Century*, eds. M. Burguete and J.-P. Connerade (Science Matters Press, Cascais, Portugal).
186. L. Wang, D. Huang, L. Lam and Z. Cheng, “Bowlics: History, advances and applications,” *Liquid Crystals Today* **26**(4), 85-111 (2017).
- 2018 187. Lin Lei (L. Lam), Liu Li and Sun Nan, “Use Fully National Journals to Obtain Priority in Publications,” *Kejie Zhongguo* (Science and Technology China) No. 7, 48-50 (2018).